

“ASK THE LIBRARIAN” about ... GOOD LITERATURE SEARCHING

Pātai: (Question)

Why do we HAVE to search library catalogues and databases? It sounds difficult and time-consuming and I'm not sure where to start. What are the steps in searching for relevant literature?

Librarian Jennifer Hobson replies:

All research requires a review of the existing research literature. But many new researchers say that there is no research in their field, so how can they review it? They often haven't always looked very far.

You always need to search library catalogues and databases (these are more-or-less the same thing) to find *relevant literature* when you are doing academic research. These *tools help you locate* the books, chapters, articles, and other documents that are ***NOT available by searching the Internet.***

Not long ago, researchers had to use card catalogues that had to be laboriously hand-searched for information. Now we are lucky because we have online catalogues. Many resources like encyclopaedias, books and journals are available online, and if you are a student, you can often access these for free because your institution pays for the access.

You need good searching skills to find relevant information quickly. Literature searching can still be time-consuming and frustrating because of the sheer volume of information available these days on just about any topic.

The good news is that you **CAN become an expert searcher** if you invest some time learning how databases work. The payback is that:

- your searching will be *faster and more efficient*
- you will feel *confident* knowing you have found *relevant literature* and be better able to decide when to stop searching
- you will be more *organised* and spend *more time reading and writing*
- this will lead to *better quality research and writing.*

Steps in the Search Process

First, it is useful to remember that searching for relevant literature is *continuous* over the course of your research as your writing is *revised, refined and updated.*

There is more than one way to search for literature. It depends on your type of project, discipline and subject area.

BEST HINT: Early in the research process consult a librarian! They are PAID to help you find resources and literature and they are terrific at doing it. They offer courses as well as individual help.

To make your search easier, follow these ten steps:

1. *Formulate your topic and analyse the question or problem.* What are you researching? Be clear about what you want to achieve. Try writing the *title of your research* as a snappy statement that answers or encapsulates your main point. **The more focused and specific you are, the easier it will be to identify what information you need to find.**
2. *Develop an overview of your topic and gather background information.* Before finalising your question you will need to get an idea of what has been published in the area. You will need to do a preliminary search on your library catalogue, or relevant databases. Check the reference lists of articles you have already read and liked. Ask experts in the field. Ensure you begin to systematically record and file all the material you find (see step 9). *You will continue to refine and focus your topic as you proceed in light of information gathered.*
3. *Define the scope of the research and determine the information requirements.* What kind of research are you doing (thesis, company report, original research)? How much information do you need to find (everything, or a few things)? Will you need specialist resources (archives, records, museums, research libraries)? What costs might be involved relating to photocopying, inter-library loans, travelling or time? **What formats/types** of documents might you need (e.g. book chapters, journal articles, theses, conference proceedings, audio visual materials, images, artefacts, microfilm, microfiche, manuscripts, minutes, company reports)? **What kind of information** will you need (peer reviewed, popular or scholarly, primary or secondary sources of information)?
4. *Refine your topic and create a search strategy.* Once you have refined your research focus, create a search strategy using a concept map. Note down the key concepts and issues relating to your research and list synonyms and related keywords (include broader, narrower terms, singular, plural, variations in spelling). Draw on relevant literature you have already identified for useful keywords, or use a thesaurus. Note down how you will limit your search (publication types, language, population, gender, age, year of publication, country of publication).
5. *Identify appropriate sources of information and research tools* What indexes, abstracts, databases and catalogues (national as well as local) are available? Do you know what you will find in them and how to select the appropriate one for your topic? **If you don't know, ask your librarian!** Most academic library websites also list guides and resources for a subject area. Searching Google can be a useful start to your search, but you'll have to critically evaluate some of the sources you find there. You may find more academically reliable sources by using Scholar Google (<http://scholar.google.com>). You might not have access to all the items you find, but you can get help by asking your librarian.
6. *Search appropriate sources of information and research tools.* Make sure you know how to enter and combine keywords, and how to broaden and narrow your search. Read the database help screens and search tips to find the best search techniques for that database. Start broad and then narrow your search (apply your limits last). Watch out for useful links that take you to *similar*, or *related* information. *Remember: ask a librarian for help and take advantage of any training offered.*

7. *Locate the information.* If your library doesn't hold the item you want they may be able to obtain it for you from another library via inter-library loans. Find out what services are available.
8. *Evaluate the information you've found.* Is the literature you have found relevant? Is it from an authoritative source? Is it reliable and accurate? Does it need to be current? Do you have too much, or too little? Is there enough information to answer your research question? Do you have to refine your search/topic further? Review articles and academic book reviews help you see where a work fits into the existing body of literature.
9. *Manage your searches and results.* **Always systematically document and record the results of your research.** Keep records of search strategies and websites accessed. Some catalogues and databases allow you to save your searches. Learn how to create efficient filing and storage using a computer program like EndNote (<http://www.endnote.com>) or Refworks (<http://www.refworks.com>) to store and manage your references and notes. Sometimes you can download details of the references directly. Once the details have been entered correctly, your bibliography, or reference list, can be generated at the click of a button. You can write and store research notes with your references so you can easily find them later (and avoid plagiarism).
10. *Update the searches and monitor new developments.* After the comprehensive literature review, keep up to date with any new publications (although at some point during your research project you will need to decide when to stop reading new literature). Find out how to set up email alerts for updates to databases, or to see the table of contents of relevant journals as they are published. The online version is sometimes available before the print copy.

Bibliography

The above information is based on the following resources which may also be useful for further reading. Services and research tools vary between libraries so make sure you contact your local library for more information.

Bell, J. (2005). *Doing your research project: A guide for first time researchers in education, health and social science* (4th ed.). Maidenhead: Open University Press.

Blaxter, L., Hughes, C., & Tight, M. (2001). *How to research* (2nd ed.). Buckingham; Philadelphia: Open University Press.

Rumsey, S. (2004). *How to find information: A guide for researchers*. Maidenhead: Open University Press.

University of Georgia. *Online library learning center*. Retrieved March 28, 2007, from <http://www.usg.edu/galileo/skills/index.phtml>

University of Surrey Library. *The researcher's companion*. Retrieved March 15, 2007, from <http://www.federalsurrey.ac.uk/researcherscompanion/FIF/title.asp>

Write to Jenny at:

jm.hobson@auckland.ac.nz

Te Kaitakawaenga Māori | Māori Liaison Librarian, University of Auckland Library